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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,632	06/20/2003	Catherine Marie Wilson	CH2764 USCNT	7179

23906 7590 04/07/2005

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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WILMINGTON, DE 19805

EXAMINER

FOX, CHARLES A

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,632

Applicant(s)

WILSON ET AL.

Examiner

Charles A. Fox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20050113.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Information Disclosure Statement

The information disclosure statement filed January 13, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered unless initialed by the examiner. The lined through U.S. patent documents have been previously made of record and need not have been placed on the IDS.

Specification

The newly amended first paragraph is objected to as it references the instant application as a continuation of itself, as well as listing the Patent number the instant application has matured into. Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6,8,9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al. in view of Podd et al. In regards to claims 1-4 Clarke et al. US 3,819,070 teach a system for unloading bulk material comprising:

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a bulk container (10) having surrounding walls, a roof, a floor mounted on a structural frame a closed front end, and a rear end at least partially open;

a platform having a means to tilt said container at least 40° from a substantially horizontal position;

a manifold (70) having an inlet and discharge sections connecting to the rear of said container over said opening;

wherein the inlet of the manifold (59) is joined to a support member (58) that is sized to cover fully the rear end of said container.

Clarke et al. do not use a permeable membrane to aid the flow of material through the manifold.

Podd et al. US 5,547,331 teach using a permeable membrane (12) for increasing the flow of a bulk cohesive material when unloading a bulk material container. Wherein said membrane has a compressed gas applied to it from a source of pressurized gas. It would have been obvious to one of ordinary skill in the art, at the time of invention to place the membrane taught by Podd et al. in the device taught by Clarke et al. in order to aid in the flow of material through the manifold as the container is being unloaded.

In regards to claims 5 and 6 Clarke et al. further teach that the manifold is removably attached to the rear of the container. Clarke et al further teach the manifold being removably mounted to the platform. See figures 5-8.

In regards to claim 8 Clarke et al. further teach that the manifold is hopper shaped. See column 7 lines 27-35.

In regards to claim 9 Clarke et al. further teach a flexible liner within the container with a bulkhead between the flexible liner and the opening at the rear of the container. While Clarke et al do not specify a material for the bulkhead It would have been obvious to one of ordinary skill in the art, at the time of invention that cardboard is a rigid material that is rupturable to allow the unloading of the material.

In regards to claim 13 Clarke et al. also teach that the manifold is rigidly connected to the platform. See figure 5.

In regards to claims 15-17 Clarke further teaches that:

the manifold is connected by a flange (58) to the container;

the manifold is moved into attachment to the rigid bulkhead by rigging points (650) at the corners of the container;

and that said manifold is built into a tilting frame section. See figure 5.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al. in view of Podd et al. as applied to claim 1 above, and further in view of the admitted prior art. Clarke et al. and Podd et al. teach the limitations of claim 1 as above, Podd et al. further teach the permeable membrane, they do not teach the membrane as being microporous. The admitted prior art teaches using a microporous membrane in a pneumatic conditioning membrane. See page 9 lines 14-20. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the device taught by Clarke et al. in view of Podd et al. with the membrane as taught by the admitted prior art in order to prevent small particles from clogging the membrane.

Claims 10-12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al. and Podd et al. as applied to claim 1 above, and further in view of Boldman. Clarke et al. and Podd et al. teach the limitations of claim 1 as above, Clarke et al further teach using vibrators in the manifold to aid in the flow of bulk material. They do not teach vibrators in the container. Boldman US 2,229,037 teaches using vibrators (16) on the floor of a container (1) carrying bulk material, wherein said vibrators are spaced to aid in the flow of material when unloading said container, said container being free of a liner. It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the vibrators as taught by Boldman to the device taught by Clarke et al. and Podd et al. in order to have the bulk material exit the container at a faster rate. The placement of the vibrators is considered a design choice that would have been obvious to one of ordinary skill in the art.

Response to Amendment

The amendments filed on January 13, 2005 has been entered into the record.

Response to Arguments

Applicant's arguments filed January 13, 2005 have been fully considered but they are not persuasive. In regard to the combination of Clarke et al. and Podd et al. for the rejections of claims 1-6,8,9 and 13 the applicant argues the motivation for the combination. The motivation is shown in figure 12 of the Podd et al. reference where the liner (104) is placed into the hopper for unloading a bulk product at the rear of the transport vehicle. As such Podd et al. reference teaches placing at least a portion of a semi permeable membrane in an unloading apparatus for bulk material.

As for the type of flow in the unloading manifold, the liner of Podd et al. as it is moved into the manifold is used to improve the flow of a bulk material, which is what is claimed in the instant invention. As such the claims stand finally rejected.

In regards to the use of art admitted by the applicant, the membranes in question are well known in the art as applicant has shown by pointing out their use in US patent 4,941,779 to Dewitz et al. as a means to move bulk material. As such the admitted prior art is proper and the rejection is made final.

In regards to the rejection of claims 10-12 the Boldman reference is argued as teaching away from the instant invention. This is not the case, the nature of the transport vehicle in Boldman is that of a rail car with a slanted bottom such that it does not have a floor per se. As such the inclined walls of Boldman (3) act as a floor and are on a similar angle as the floor of the instant invention when being unloaded. As such Boldman does teach vibrators as used in the instant invention. As for the activation patterns of the vibrators the applicant is arguing, this is a moot point as the activation patterns are not being claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 571-272-6923. The examiner can normally be reached between 7:00-4:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 571-272-6607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAF

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4-4-05

Kathy Matecki

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